

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)  
217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2008; month=8; day=6; hr=11; min=43; sec=20; ms=953; ]

=====

Application No: 10591550 Version No: 2.0

**Input Set:****Output Set:**

**Started:** 2008-06-30 16:43:38.179  
**Finished:** 2008-06-30 16:43:40.306  
**Elapsed:** 0 hr(s) 0 min(s) 2 sec(s) 127 ms  
**Total Warnings:** 74  
**Total Errors:** 0  
**No. of SeqIDs Defined:** 86  
**Actual SeqID Count:** 86

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (26)
W 213	Artificial or Unknown found in <213> in SEQ ID (28)
W 213	Artificial or Unknown found in <213> in SEQ ID (29)
W 213	Artificial or Unknown found in <213> in SEQ ID (30)
W 213	Artificial or Unknown found in <213> in SEQ ID (31)
W 213	Artificial or Unknown found in <213> in SEQ ID (32)

**Input Set:**

**Output Set:**

**Started:** 2008-06-30 16:43:38.179  
**Finished:** 2008-06-30 16:43:40.306  
**Elapsed:** 0 hr(s) 0 min(s) 2 sec(s) 127 ms  
**Total Warnings:** 74  
**Total Errors:** 0  
**No. of SeqIDs Defined:** 86  
**Actual SeqID Count:** 86

Error code

Error Description

This error has occurred more than 20 times, will not be displayed

# SEQUENCE LISTING

<110> Song, Hee-Sook  
 Roche, Christina  
 Morra, Marc  
 Dammann, Christian  
 Jensen, Timothy  
 Dobson, Alleson

<120> TRANSGENIC EXPRESSION CONSTRUCTS FOR VEGETATIVE PLANT TISSUE  
 SPECIFIC EXPRESSION OF NUCLEIC ACIDS

<130> 13987-00021-US

<140> 10591550  
 <141> 2006-09-01

<150> PCT/EP2005/002052  
 <151> 2005-02-26

<150> US 60/548911  
 <151> 2004-03-01

<150> US 60/591452  
 <151> 2004-07-27

<160> 86

<170> PatentIn version 3.3

<210> 1  
 <211> 863  
 <212> DNA  
 <213> Pisum sativum

<220>  
 <221> promoter  
 <222> (1)..(863)  
 <223> promoter region of ptxA gene including 5'-untranslated region

<220>  
 <221> misc\_feature  
 <222> (300)..(583)  
 <223> potential core region of the promoter comprising clusters of  
 promoter elements

<220>  
 <221> TATA\_signal  
 <222> (549)..(554)

<220>  
 <221> 5'UTR  
 <222> (584)..(863)

```

<400> 1
gcaatttttt gtgaagctga gggaggattg gatttttacac ctattcaaaa gtcattcaaa      60

gtttgtccct ccattcaagg atgaatgtag atttttcaag catcaaacac aagaatcact      120

agcataacat gttttgaaac ccacacactt aaattaatgt taggaatatc aaatccaata      180

taaaatcata gttgtcaatt acataactcaa tcaagtcctt ttcttttacc caataaacat      240

caacatattg cttcttccat taagcatata aacatcaaag tctaaaacta gcaaaatgtt      300

gttttttagga tgacacattt catacatagt ttaaaagata cttgattcga ttacaaaaag      360

aaattaccaa tagtttagca caaagtctaa agcataatta aagcatcaca tgtgcagatt      420

tatgaaaaaa agattaagat tgcccccttc atcacggggtc gaataatagc actacttgtc      480

actacatgtt aaaaaaatgt cctctagtag atcaaaacttt ttccattgat tccccctatc      540

catgaaaaaa ataaacaaat tcttaagaca caaaaaaatg gccccacatc cttttttctg      600

gcctagtttg tttgaattca ttctaactct tgaatatgta acgaggccca ctaaaaatca      660

atcaatgatt taacataaaa aatgaatagt ttaattccaa tttgctgcaa catggtccgt      720

gaatatgact cacgagaaag atatatcaaa atatcaaaat ttcatagttt ttttcacat      780

ataaacctca tcaactcattc tattttttta agtgcaaagc ttcatagtag tgagcacaca      840

cattacacta aaatcttcga aac                                             863

```

```

<210> 2
<211> 1380
<212> DNA
<213> Glycine max

```

```

<220>
<221> promoter
<222> (1)..(1380)
<223> promoter region of SbHRGP3 gene including 5' untranslated region

```

```

<220>
<221> misc_feature
<222> (800)..(1179)
<223> potential core region of the promoter comprising clusters of
promoter elements

```

```

<220>
<221> TATA_signal
<222> (1147)..(1152)

```

```

<220>
<221> 5'UTR
<222> (1180)..(1380)
<223> potential 5' UTR

```

<400> 2

tagaaagctt ttcaacaatc atgcccatgt caagtgtaaa acaggtttac ctctcttaaa	60
taaccgtatt aaaatgctga atgatgtata tatgtgggtt caaattacat aatttgtaag	120
tatgtttacac attgtataaa tatgttttag agaaaaatgt aaacttatat gtctaaagtt	180
ataaaagaaa catgtccaac acatttcagt taagatttaa atagtataaa ttaaaaatta	240
tcgatgatga caaaaaattg taaatataat tcatttttaa aaaagttaag aaattgaaaa	300
aggaaatatc gagaaaaaaa tatgtcgatt atatatatgt gtgagctgag tgaatatata	360
tgtatatttt atttttgact gaatatatgt gtgtatagac aataatgcgc agaatgccga	420
tcgatgaatt gtttactgca tttccaaata tgtgtgcata agcgttcac atgtcaccca	480
tgttgtaatt agtttcttcc ctggatgaat tactaagaaa cagattgatt gatagtacta	540
tattaaatta tgtagcttta catgtcagga aaatgtagtt gcagtattat gtaatgtaat	600
taataggaag tcacagacaa tttgaagaca atttcttttag cttacctatc tcatgccaca	660
attatgtact tacgacagta aaatgtttta aagcaaaaaa aagaaagaag aagaagaagt	720
aataaatgga attatataga atgtactctt tgtcttcac tgccctataa ttcttgcagc	780
agccaaagca taatagcatg caatatgcac atattcgttt taggctttta gcctccacga	840
tctgttaatg gaaagtgaag agtaagagat atgaagttca ttatggcagc catggtccca	900
gggaagcact agaagatatg aaatgacata aaaggtcacc atgcataatg ctttaaatgc	960
ttgctataga atcaaaaaat gaagagatgt gacaaaattgt tacatctaata acgcaataat	1020
ttgacaaaga cgactatgcg tttatatatt tattttaatt agttggcgtc tcttattata	1080
aagaaaataa gggcagtgtc aacatttcca ggcaactagt tagttatttt attttcttgt	1140
ttataattat ttccatatag ctagctgtct ctatctaate caaatccgct ttccacaacc	1200
aacttggtcg cattgggtcca aaaaactcaa tatcaatatt ttcgaaatag ttttagcatt	1260
gttttaggaag agaattgtaa gagataaaat ctaagtactc cacctaccaa gataaaatag	1320
ttggataaat gggtaaaaaa agttgtataa agggcaacac tacctctcct aatggcagta	1380

<210> 3

<211> 26

<212> DNA

<213> Artificial sequence

<220>

<223> Oligonucleotide primer ptxA5'

<400> 3  
ggcgcgcccg caattttttg tgaagc 26

<210> 4  
<211> 25  
<212> DNA  
<213> Artificial sequence  
  
<220>  
<223> Oligonucleotide primer ptxA3'

<400> 4  
tctagataag tttcgaagat tttag 25

<210> 5  
<211> 29  
<212> DNA  
<213> Artificial sequence  
  
<220>  
<223> Oligonucleotide primer SbHRGP3-5'

<400> 5  
tctagataga agcttttcaa caatcatgc 29

<210> 6  
<211> 24  
<212> DNA  
<213> Artificial sequence  
  
<220>  
<223> Oligonucleotide primer SbHRGP3-3'

<400> 6  
agatcttact gccattagga gagg 24

<210> 7  
<211> 1381  
<212> DNA  
<213> Glycine max

<220>  
<221> promoter  
<222> (1)..(1368)

<220>  
<221> misc\_feature  
<222> (801)..(1178)  
<223> potential core region of promoter

<220>  
<221> TATA\_signal

<222> (1146) .. (1151)

<220>

<221> 5'UTR

<222> (1369) .. (1381)

<400> 7

aagctttttca acaatcatgc ccatgtcaag tgtaaaacag gtttacctct cttaaataac	60
cgtattaaaa tgctgaatga tgtatatatg tgggttcaaa ttacataatt tgtaagtatg	120
ttacacattg tataaatatg ttttagagaa aaatgtaaac ttatatgtct aaagttataa	180
aagaaacatg tccaacacat ttcagttaag atttaaatag tataattaaa aattatcgat	240
gatgacaaaa aattgtaaat ataattcatt ttaaaaaaag ttaagaaatt gaaaaaggaa	300
atatcgagaa aaaaatatgt cgattatata tatgtgtgag ctgagtgaat atatatgtat	360
atthttatthtt tgactgaata tatgtgtgta tagacaataa tgcgcagaat gccgatcgat	420
gaattgttta ctgcatttcc aaatatgtgt gcataagcgt tccacatgtc acccatgttg	480
taattagthtt cttccctgga tgaattacta agaaacagat tgattgatag tactatatta	540
aattatgtag ctttcatgt caggaaaatg tagttgcagt attatgtaat gtaattaata	600
ggaagtcaca gacaatttga agacaatttc tttagcttac ctatctcatg ccacaattat	660
gtacttacga cagtaaaatg tttaaaagca aaagcaaaaa aaagaaagaa gaagaagaag	720
taataaatgg aattatatag aatgtactct ttgtcttcat ctgccctata attcctgcag	780
cagccaaagc ataatagcat gcaatatgca catattcgtt ttaggctttt agtccacga	840
tctgttaatg gaaagtgaag agtaagagat atgaagttca ttatggcagc catggtccca	900
gggaagcact agaagatatg aaatgactaa aaggtcacca tgcataatgc tttaaatgct	960
tgctatagaa tcaaaaaatg aagagatgtg acaaattggt acatctaata cgcaataatt	1020
tgacaaagac gactatgcgt ttatatatthtt atthttaatta gttggcgtct cttattataa	1080
agaaaataag ggcagtgtca acatttccag gcaactagtt agttatthtta tthttctgtt	1140
tataattatt tccatatagc tagctgtctc tatctaathc aaatccgcgt tccacaacca	1200
acttggtcca aaaaactcaa tatcaatatt ttcaaaatag tthtagcatt gtttaggaag	1260
agaattgtaa gagataaaat ctaagtactc cacctaccaa gataaaatag ttggataaat	1320
gggtaaaaaa gttgtataaa gggcaacact acctctccta atggcagtac caaaacccaa	1380
g	1381

<210> 8



<211> 1388  
<212> DNA  
<213> Glycine max

<220>  
<221> promoter  
<222> (1)..(1175)  
<223> potential promoter region

<220>  
<221> misc\_feature  
<222> (796)..(1175)  
<223> potential core region of promoter

<220>  
<221> TATA\_signal  
<222> (1143)..(1148)

<220>  
<221> 5'UTR  
<222> (1176)..(1388)

<400> 8  
aagcttttca acaatcatgc ccatgtcaag tgtaaaacag gtttacctct cttaaataac 60  
  
cgtattaaaa tgctgaatga tgtatatatg tgggttcaaa ttacataatt tgtaagtatg 120  
  
ttacacattg tataaatatg ttttagagaa aaatgtaaac ttatatgtct aaagttataa 180  
  
aagaaacatg tccaacacat ttcagttaag atttaaatag tataaattaa aaattatcga 240  
  
tgatgacaaa aaattgtaaa tataattcat tttaaaaaaa gttaagaaat tgaaaaagga 300  
  
aatatcgaga aaaaaatatg tcgattatat atatgtgtga gctgagtgaa tatatatgta 360  
  
tattttattt ttgactgaat atatgtgtgt atagacaata atgcgcagaa tgccgatcga 420  
  
tgaattgttt actgcatttc caaatatgtg tgcataagcg ttccacatgt cacccatgtt 480  
  
gtaattagtt tcttccttgg atgaattact aagaaacaga ttgattgata gtactatatt 540  
  
aaattatgta gctttacatg tcaggaaaat gtagttgcag tattatgtaa tgtaattaat 600  
  
aggaagtcac agacaatttg aagacaattt ctttagctta cctatctcat gccacaatta 660  
  
tgtacttacg acagtaaaat gtttaaaagc aaaaaaaga aagaagaaga agaagtaata 720  
  
aatggaatta tatagaatgt actctttgtc ttcactctgcc ctataattcc tgcagcagcc 780  
  
aaagcataat agcatgcaat atgcacatat tcgttttagg cttttagcct ccacgatctg 840  
  
ttaatggaaa gtgaaaagta agagatatga agttcattat ggcagccatg gtcccaggga 900  
  
agcactagaa gatatgaaat gacataaaaag gtcaccatgc ataatgcttt aaatgcttgc 960  
  
tatagaatca aaaaatgaag agatgtgaca aattgttaca tctaatacgc aataatttga 1020

caaagacgac tatgcgttta tatatattatt ttaattagtt ggcgtctctt attataaaaga	1080
aaataagggc agtgtcaaca tttccaggca actagttagt tattttattt tcttgtttat	1140
aattatttcc atatagctag ctgtctctat ctaatccaaa tccgctttcc acaaccaact	1200
tggtcgcatt ggtccaaaaa actcaatatc aatattttcg aaatagtttt agcattgttt	1260
aggaagagaa ttgtaagaga taaaatctaa gtactccacc taccaagata aaatagttgg	1320
ataaatgggt aaaaaaagtt gtataaaggg caacactacc tctcctaattg gcagtaccaa	1380
aacccaag	1388

<210> 9  
 <211> 1373  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> promoter  
 <222> (1)..(1172)  
 <223> potential promoter region

<220>  
 <221> misc\_feature  
 <222> (793)..(1172)  
 <223> potential core region of promoter

<220>  
 <221> TATA\_signal  
 <222> (1140)..(1145)

<220>  
 <221> 5'UTR  
 <222> (1173)..(1373)

<400> 9	
cttttcaaca atcatgccca tgtcaagtgt aaaacagggt tacctctctt aaataaccgt	60
attaaaaatgc tgaatgatgt atatatgtgg gttcaaatta cataatttgt aagtatgtta	120
cacattgtat aaatatgttt tagagaaaaa tgtaaactta tatgtctaaa gttataaaaag	180
aaacatgtcc aacacatttc agttaagatt taaatagtat aaattaaaaa ttatcgatga	240
tgacaaaaaa ttgtaaatat aattcatttt aaaaaaagtt aagaaattga aaaaggaaat	300
atcgagaaaa aaatatgtcg attatatata tgtgtgagct gagtgaatat atatgtatat	360
tttatttttg actgaatata tgtgtgtata gacaataatg cgcagaatgc cgatcgatga	420
attgtttact gcatttccaa atatgtgtgc ataagcggtc cacatgtcac ccatgttgta	480

```

attagtttct tccctggatg aattactaag aaacagattg attgatagta ctatattaaa 540
ttatgtagct ttacatgtca ggaaaatgta gttgcagtat tatgtaatgt aattaatagg 600
aagtcacaga caatttgaag acaatttctt tagcttacct atctcatgcc acaattatgt 660
acttacgaca gtaaaatgtt taaaagcaaa aaaaagaaag aagaagaaga agtaataaat 720
ggaattatat agaatgtact ctttgtcttc atctgcccta taattcctgc agcagccaaa 780
gcataatagc atgcaatatg cacatatctg ttttaggctt ttagcctcca cgatctgtta 840
atggaaagtg aaaagtaaga gatatgaagt tcattatggc agccatggtc ccagggaagc 900
actagaagat atgaaatgac ataaaaggtc accatgcata atgctttaaa tgcttgctat 960
agaatcaaaa aatgaagaga tgtgacaaat tgttacatct aatagcaat aatttgacaa 1020
agacgactat gcgtttatat atttatttta attagttggc gtctcttatt ataaagaaaa 1080
taagggcagt gtcaacattt ccaggcaact agttagttat tttattttct tgtttataat 1140
tatttccata tagctagctg tctctatcta atccaaatcc gctttccaca accaacttgg 1200
tcgcattggc ccaaaaaact caatatcaat attttcgaaa tagtttttagc attgtttagg 1260
aagagaattg taagagataa aatctaagta ctccacctac caagataaaa tagttggata 1320
aatgggtaaa aaaagttgta taaagggcaa cactacctct cctaattggca gta 1373

```

<210> 10

<211> 1924

<212> DNA

<213> Artificial sequence

<220>

<223> Artificial sequence construct of ptxA promoter and ubiquitin intron

<220>

<221> promoter

<222> (1)..(583)

<223> potential promoter region

<220>

<221> misc\_feature

<222> (300)..(583)

<223> potential core region of promoter

<220>

<221> TATA\_signal

<222> (549)..(554)

<220>

<221> 5'UTR

<222> (584)..(828)

<220>  
 <221> misc\_feature  
 <222> (829)..(874)  
 <223> multiple cloning site

<220>  
 <221> Intron  
 <222> (875)..(1924)  
 <223> Zea mais ubiquitin intron

<400> 10  
 gcaatTTTT gtgaagctga gggaggattg gatTTTtacac ctattcaaaa gtcattcaaa 60  
 gTTTgtccct ccattcaagg atgaatgtag atTTTtcaag catcaaacac aagaatcact 120  
 agcataacat gTTTTgaaac ccacacactt aaattaatgt taggaatatc aaatccaata 180  
 taaaatcata gTgtgcaatt acatactcaa tcaagtccct ttctTTtacc caataaacat 240  
 caacatattg cttcttccat taagcatata aacatcaaag tctaaaacta gcaaaatgtt 300  
 gTTTTtagga tgacacattt catacatagt ttaaaagata cttgattcga ttacaaaaag 360  
 aaattaccaa tagTTtagca caaagtctaa agcataatta aagcatcaca tgtgcagatt 420  
 tatgaaaaaa agattaagat tgcccccttc atcacgggtc gaataatagc actactgtc 480  
 actacatgtt aaaaaaatgt cctctagtag atcaaacttt ttccattgat tccccctatc 540  
 catgaaaaaa ataaacaaat tcttaagaca caaaaaaatg gccccacatc cTTTTtctg 600  
 gcctagTTtg tttgaattca ttctaactct tgaatatgta acgaggccca ctaaaaatca 660  
 atcaatgatt taacataaaa aatgaatagt ttaattccaa tttgctgcaa catggtccgt 720  
 gaatatgact cacgagaaag atatatcaaa atatcaaaat ttcatagttt ttttcaccat 780  
 ataaacctca tcactcattc tTTTTTTta agtgcaaagc ttcatagtta attaaggcgc 840  
 gccaaagcttg catgcctgca ggtcgactct agaggatctc ccccaaatec acccgtcggc 900  
 acctccgctt caaggtagc cgctcgctc ccccccccc cctctctac cttctctaga 960  
 tcggcgTTcc ggtccatggt tagggcccg tagttctact tctgttcag tttgtgttag 1020  
 atccgtgttt gtgttagatc cgtgctgcta gcgttcgtac acggatgcga cctgtacgtc 1080  
 agacacgttc tgattgctaa cttgccagtg tttctctttg gggaatcctg ggatggctct 1140  
 agccgttccg cagacgggat cgatttcag atTTTTTTtg tttcgttgca tagggTTtg 1200  
 tttgcccttt tcctttatTT caatatatgc cgtgcacttg tttgtcgggt catcttttca 1260  
 tgctTTTTTT tgtcttggt gtgatgatgt ggtctggttg ggcggtcggt ctagatcgga 1320  
 gtagaattct gTTTcaaact acctggtgga tttattaatt ttggatctgt atgtgtgtgc 1380

catacatatt catagttacg aattgaagat gatggatgga aatatcgatc taggataggt	1440
atacatgttg atgcggggttt tactgatgca tatacagaga tgctttttgt tcgcttggtt	1500
gtgatgatgt ggtgtggttg ggcggtcgtt cattcgttct agatcggagt agaatactgt	1560
ttcaaactac ctggtgtatt tattaatttt ggaactgtat gtgtgtgtca tacatcttca	1620
tagttacgag ttttaagatgg atggaaatat cgatctagga taggtataca tgttgatgtg	1680
ggttttactg atgcatatac atgatggcat atgcagcatc tattcatatg ctctaacctt	1740
gagtacctat ctattataat aaacaagtat gttttataat tattttgatc ttgatatact	1800
tggtatgatgg catatgcagc agctatatgt ggattttttt agccctgcct tcatacgcta	1860
tttatttgct tgggtactgtt tcttttgteg atgetcaccg tgttgtttgg tgttacttct	1920
gcag	1924

<210> 11  
 <211> 23  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> oligonucleotide primer ptxA3'-2

<400> 11	
tctagataaa ctatgaagct ttg	23

<210> 12  
 <211> 22  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> oligonucleotide primer

<400> 12	
ccgcttcgaa accaatgcct aa	22

<210> 13  
 <211> 24  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> oligonucleotide primer

<400> 13	
tggtcgtcat gaagatgcgg actt	24

<210> 14  
<211> 20  
<212> DNA  
<213> Artificial sequence  
  
<220>  
<223> Oligonucleotide primer ptxaF1  
  
<400> 14  
gggccaagga catagtagaa 20

<210> 15  
<211> 20  
<212> DNA  
<213> Artificial sequence  
  
<220>  
<223> Oligonucleotide primer ptxaR1  
  
<400> 15  
tgaagttaca aacgctgaca 20

<210> 16  
<211> 20  
<212> DNA  
<213> Artificial sequence  
  
<220>  
<223> Oligonucleotide primer ptxaR1  
  
<400> 16  
agagcatcac acgcaatcaa 20

<210> 17  
<211> 20  
<212> DNA  
<213> Artificial sequence  
  
<220>  
<223> Oligonucleotide primer SbHRGP3-F1  
  
<400> 17  
catgtgcgcg tacttttgta 20

<210> 18  
<211> 20  
<212> DNA  
<213> Artificial sequence  
  
<220>  
<223> Oligonucleotide primer SbHRGP3-F1

<400> 18  
atgaagaata taagccaata 20

<210> 19  
<211> 20  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Oligonucleotide primer SbHRGP3-R1

<400> 19  
agtgccatac aactgtctaa 20

<210> 20  
<211> 352  
<212> PRT  
<213> Pisum sativum

<400> 20

Met Ala Asn Phe Ala Ile Ala Asn Val Leu Ile Leu Leu Leu Asn Leu  
1 5 10 15

Ser Thr Leu Leu Asn Val Leu Ala Cys Pro Tyr Cys Pro Tyr Pro Ser  
20 25 30

Pro Lys Pro Pro Thr His Lys Pro Pro Ile Val Lys Pro Pro Val His  
35 40 45

Lys Pro Pro Lys Pro Gln Pro Cys Pro Pro Pro Ser Ser Ser Pro Lys  
50 55 60

Pro Pro His Val Pro Lys Pro Pro His Tyr Pro Lys Pro Pro Ala Val  
65 70 75 80

His Pro Pro His Val Pro Lys Pro Pro Ala Val His Pro Pro His Val  
85 90 95

Pro Lys Pro Pro Val Val His Pro Pro Ile Val His Pro Pro Tyr Val  
100 105 110

Pro Lys Pro Pro Val Val Lys Pro Pro Val Val Lys Pro Pro His Val  
115 120 125

Pro Lys Pro Pro Val Val Pro Val Thr Pro Pro Tyr Ile Pro Lys Pro  
130 135 140

Pro Ile Val Phe Pro Pro His Val Pro Leu Pro Pro Val Val Pro Val  
145 150 155 160

Thr Pro Pro Tyr Val Pro Lys Pro Pro Ile Val Phe Pro Pro His Val  
165 170